

Pukekura Park Portal Project

The Pukekura Park Portal Project is a Community Partnership Fund Project coordinated by The Friends of Pukekura Park in partnership with Puke Ariki, New Plymouth.

This Project is a pilot for T.E.R:R.A.I.N.

**"Taranaki Educational Resource:
Research, Analysis and Information Network"**

and sets out to digitise community data and create a resource of georeferenced material suitable for analysis using Geographic Information Systems. Under access agreements the public use of the information will be allowed for non-profit purposes.



Pukekura Park Portal Project

Partnership between

- Friends of Pukekura Park
- Puke Ariki – museum and library complex
- NPDC – community assets parks and GAS

Funded by
the Community Partnership Fund
NZ Digital Strategy



Puke Ariki and T.E.R:R.A.I.N

- collecting and the Web
- community data sets
- citizen scientist
- geographical information (GIS)



Puke Ariki Customer Services



- Kete
- Aotearoa People's Network



What is GIS?

Geographic Information Systems manage, analyse, and display geographic knowledge in interactive ways.

Geographic Datasets are file bases and databases of geographic information—features, networks, topologies, terrains, surveys, and attributes.

Data Models incorporate advanced behaviour and integrity like other information systems and play a critical role in GIS.

Metadata enables users to organise, discover, and gain access to shared geographic knowledge.

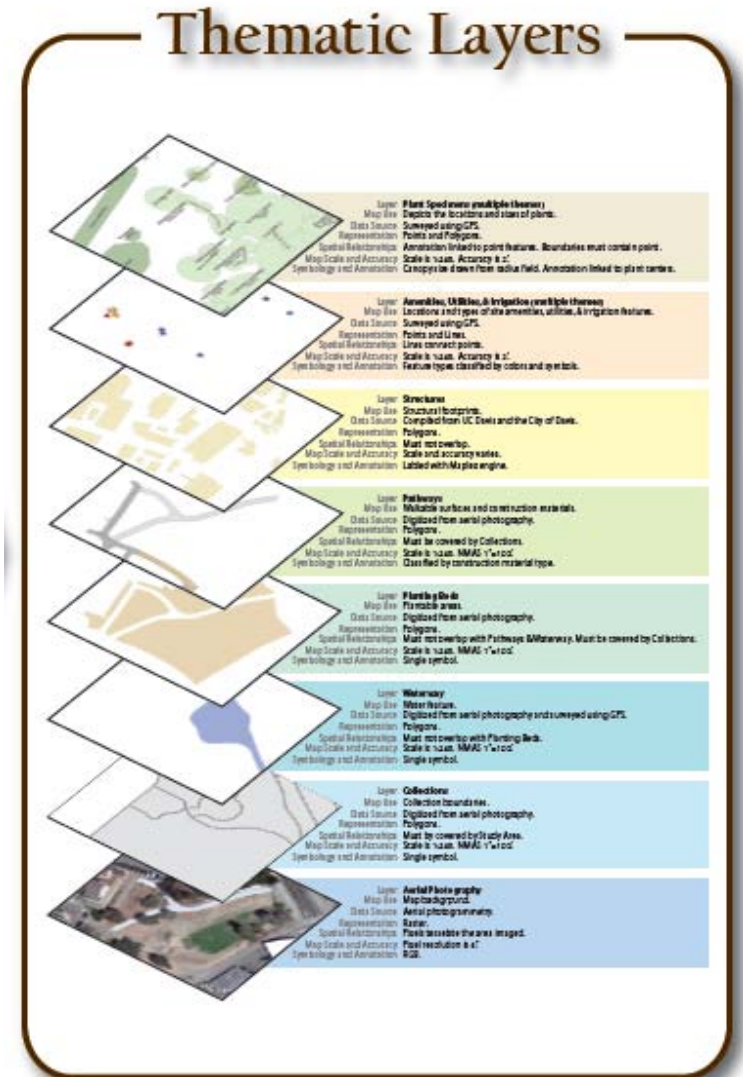
Reference: ESRI www.esri.com



GIS arranges information in layers.

Each theme has specific attributes, and may be turned on or off as desired.

The relationships between data sets may be analysed.



Reference: ESRI <http://www.esri.com/industries/libraries/news-community/data-model-botanical.html>



Data Issues:

Where does the information come from?

C	D	E	F
Month	Site Name	Trap ref	Trap Type
	Manganui		Fenn 4
Dec-02	Manganui		Fenn 4
Mar-03	Little Makarua		Fenn 6
Mar-03	Temper's		Fenn 6
12 Aug-03	Aug-03 Manganui		Fenn 6
19 Aug-03	Aug-03 Manganui		Fenn 6
19 Sep-03	Sep-03 Manganui		Fenn 6
02 Oct-03	Oct-03 Manganui		Fenn 6
19 Nov-03	Nov-03 Little Makarua		Fenn 6
Jan-04	Dunbeigh		Fenn 4
Aug-04	Manganui		Fenn 6
	Ngatoronu		DOC200
Aug-04	Little Makarua		DOC200
Aug-04	Manganui		DOC200
Sep-04	ngatoro-mai		Doc200
Sep-04	Boundary		Doc-200



Data Issues:

Where does the information come from?

- The raw data has to come from trusted sources
- With fine scale data you may more accurately manage resources
- Where is data lacking?
- National datasets could combine data from academic research projects, NGOs, consultants and the community.



Who in the community?

“Community groups have access to many forms of data and information that are qualities of the community itself and are therefore not available from any source other than from the community. Traditional ecological knowledge, local spirituality, aesthetic and amenity values are relevant examples”

(Thomas Meredith, founder of PPGIS, 1998).



Public Participatory GIS

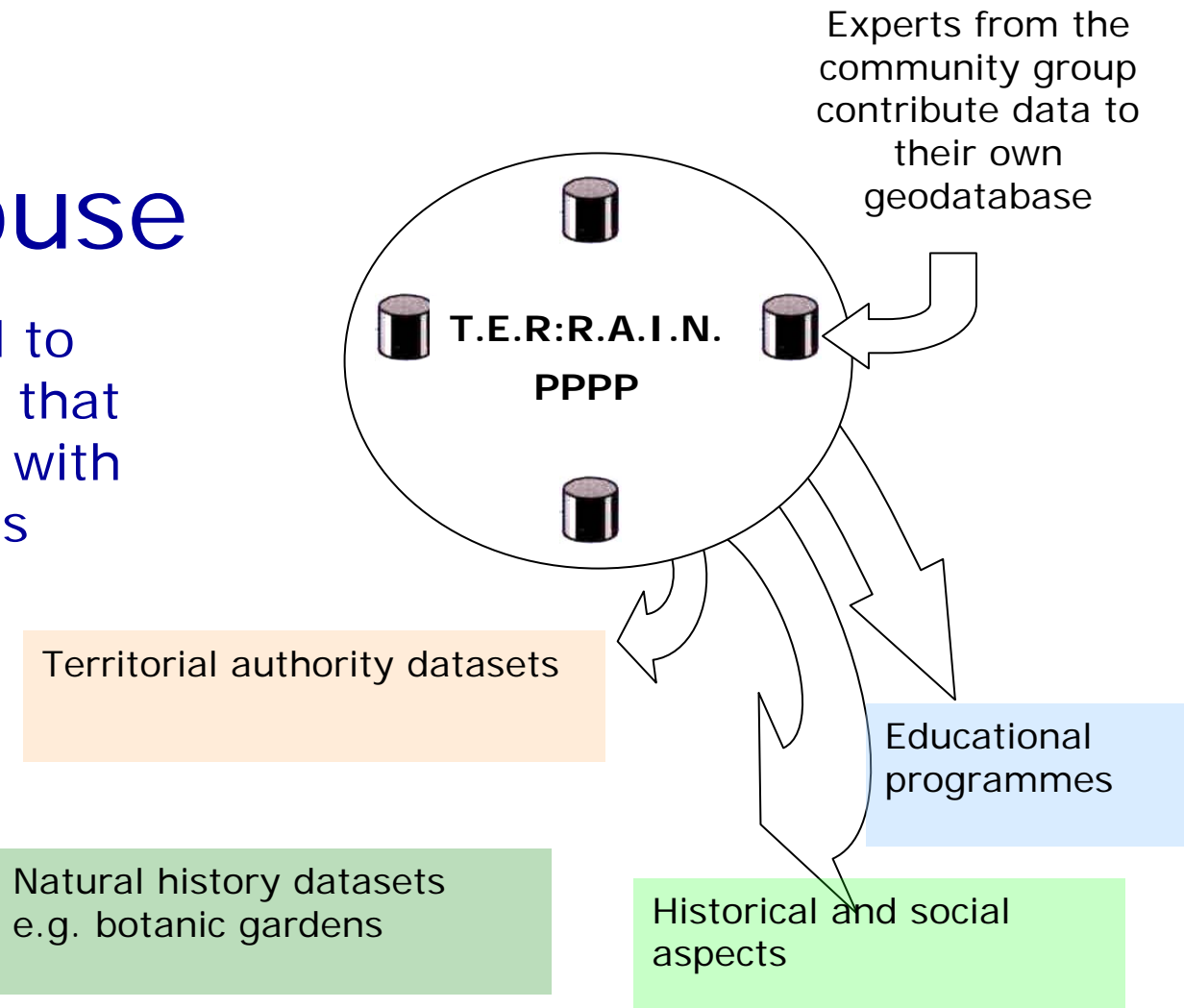
Geographic information technologies are used in participatory settings and support:

- community inclusion and engagement
- integrated conservation and development
- sustainable natural resource management
- discussion of customary property rights



A data clearing-house

Data is forwarded to relevant agencies that have agreements with community groups



(Global Learning and Observations to Benefit the Environment)

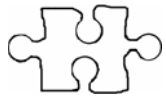


Where do you store the data?

Kete

A digital archive developed with Digital Strategy funding
and to be available to most libraries next year.





Where to next?



2008 - April 2009



Load data to the Kete community data repository

Assist testing the ESRI Botanic Gardens data model with the University of California Davis Arboretum.

Plan to incorporate the needs of other community groups involved in Pukekura Park

Demonstrate how PPGIS contributes to public stewardship and engagement



Needs

for the following phase April 2009 - 2010

- Funding to enable accurate mapping of Pukekura Park botanic information
- Find an academic partner to mesh Pukekura Park datasets to urban design applications
- Continue discussion with national agencies to enable community information incorporation
- Negotiate reciprocal data flow



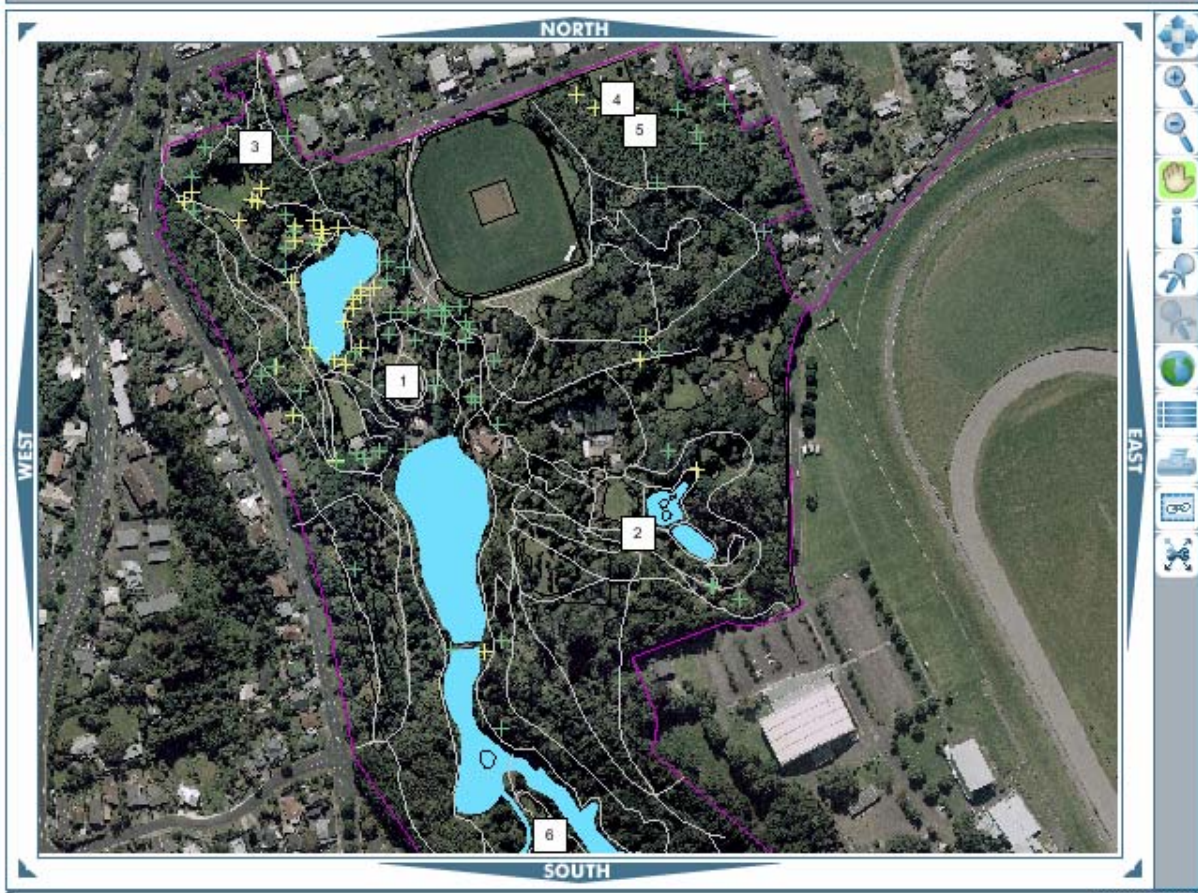
Map Tools

Welcome fopp | Logout | Change Password

Search Tools
Tree type (species) search
Results

Advanced Tools
Selection
Redlining
Measure
Buffer selections
Get Directions
Search by Co-ordinates

Layer Manager
Pukekura Park Project
Notable trees
Bird food plants
Ethno trees
Spring sites
Paths
Streams
Islands



Selection List
Notable trees

- Check All
- 1 Tree no. 6
- 2 Tree no. 11
- 3 Tree no. 13
- 4 Tree no. 51
- 5 Tree no. 56
- 6 Tree no. 67

Legend
FOPP
+ Notable trees
+ Bird food plants
+ Ethno trees
● Spring sites
- Paths
- Streams
□ Islands
□ Lakes
□ Lawns
□ Park Polygon
Urban Ortho 2005



Map Tools

Search Tools

type (species) search
ts

Advanced Tools

Selection
Redlining
Measure
Buffer selections
Get Directions
Search by Co-ordinates

Layer Manager

Pukekura Park Project

- Notable trees
- Bird food plants
- Ethno trees
- Spring sites
- Paths
- Streams
- Islands



More Information

Attribute Details For

1 features found. Displaying 1 to 1

Attribute	Value
Tree no. 67	
Descriptor	Kauri v large
Genus Spec	Agathis australis
Easting	1693235.34
Northing	5675473.04
Species	Search for kauri in Kete (Topics)
Images in Kete	Search for kauri in Kete (Images)
Audio in Kete	Search for kauri in Kete (Audio)
Videos in Kete	Search for kauri in Kete (Videos)
Web Links in Kete	Search for kauri in Kete (Web Links)
Documents in Kete	Search for kauri in Kete (Documents)
Discussion in Kete	Search for kauri in Kete (Discussion)
Wikipedia article	Look up kauri in Wikipedia

Print

Search:



Kete Pukekura Park - Staging

Elise Smith | [Logout](#)

[Home](#) | [Browse](#) | [About](#) | [Help](#) | [Contact](#) | [Add Item](#) | [Add basket](#)

Refine your search for "kauri" searching in whole site

Options

Sort by: That are:

Topics (1) | [Images \(3\)](#) | [Audio \(1\)](#) | [Videos \(0\)](#) | [Web Links \(0\)](#) | [Documents \(6\)](#) | [Discussion \(0\)](#)

Results in topics for your search "kauri"

Showing 1-1 results of 1

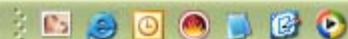
Plants and Wildlife

Information on plants and wildlife.

[more >>](#)

Internet

start



Internet Explorer

Microsoft PowerPoint ...



10:13

Search: 

Kete Pukekura Park - Staging





Elise Smith  | [Logout](#)

[Home](#) | [Browse](#) | [About](#) | [Help](#) | [Contact](#) | [Add Item](#) | [Add basket](#)

Refine your search for "kauri" searching in whole site

Options

Sort by:  That are: 

- [Topics \(1\)](#)
- [Images \(3\)](#)
- [Audio \(1\)](#)**
- [Videos \(0\)](#)
- [Web Links \(0\)](#)
- [Documents \(6\)](#)
- [Discussion \(0\)](#)

Results in audio for your search "kauri"

Showing 1-1 results of 1

[ARC2008-333 Fuller, George First Kauri 1909](#)

George Fuller talks about the history of this kauri in Pukekura Park Plant ID 106 Agathis australis, kauri Easting 1693427.751 Northing 5675223.223
[more >>](#)

[Edit](#) [History](#) [Discuss](#) [Zoom Update item \(+related\)](#) [Delete](#)

Baskets

- George Fuller Collection
 - Plants and Wildlife
- 60 Springs

ARC2008-333 Fuller, George First Kauri 1909

George Fuller talks about the history of this kauri in Pukekura Park

Microsoft Internet Explorer

You are about to download a file from Kete. Kete is an open digital repository and as such we can not guarantee the integrity of any file in the repository. Please ensure that your virus scan software is operating and is configured to scan this download.

Are you sure you want to proceed?

Filename: ARC2008-333_Fuller__George_First_Kauri_1909.mp3
(listen)

Size: 691.6 KB

Recording type: audio/mpeg

Created by: [admin](#) Last Edited by: [admin](#) Last Edited: 24/11/2008 23:51

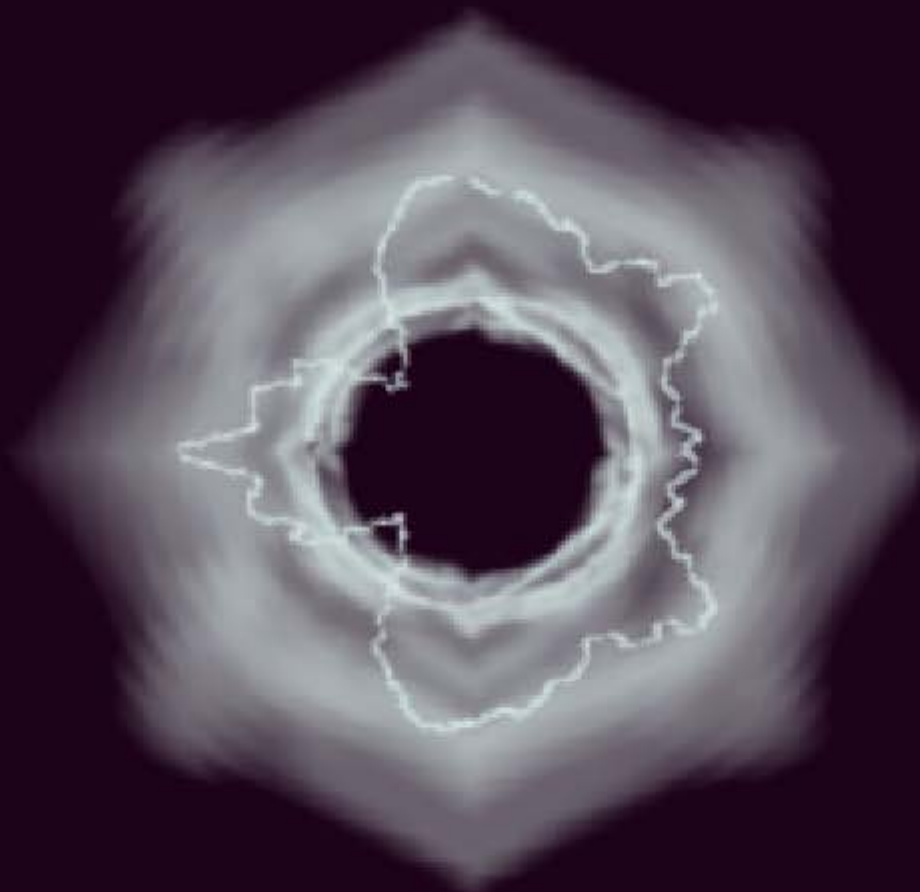
Flag as: [inaccurate](#) | [duplicate](#) | [inappropriate](#) | entered by [mistake](#) | [has typos](#)

ARC2008-333_Fuller_George_First_Kauri_1909

Find Album Info



ARC2008-333_Fuller_Geo... 0



Battery : Randomization


Total Time: 0

Playing: 128 K bits/second



Search: 

Kete Pukekura Park - Staging : *George Fuller Collection*

Elise Smith  | [Logout](#)

[Home](#) | Browse: [Site](#) or [George Fuller Collection](#) | [About](#) | [Help](#) | [Contact](#) | [Add Item](#) | [Add basket](#)

	 Edit	 History	 Discuss	Zoom Update item (+related)	Delete
--	--	---	---	---	------------------------

Baskets

- [George Fuller Collection](#)
 - [Plants and Wildlife](#)
- [60 Springs](#)

Native Tree 2, Kauri

Original Filename: [NativeTree_2_kauri.jpg \(view\)](#)

Original Size: 133 KB

Original Image Type: image/pjpeg



- [Small sq](#)
- [Medium](#)
- [Large](#)
- [Small](#)

Search: 

Kete Pukekura Park - Staging : *George Fuller Collection*

Elise Smith  | [Logout](#)

[Home](#) | Browse: [Site](#) or [George Fuller Collection](#) | [About](#) | [Help](#) | [Contact](#) | [Add Item](#) | [Add basket](#)

	 Edit	 History	 Discuss	Zoom Update item (+related)	Delete
--	--	---	---	---	------------------------

Baskets

- [George Fuller Collection](#)
 - [Plants and Wildlife](#)
- [60 Springs](#)

Native Tree 2, Kauri

Original Filename: [NativeTree_2_kauri.jpg \(view\)](#)

Original Size: 133 KB

Original Image Type: image/pjpeg



- [Small sq](#)
- [Medium](#)
- [Large](#)
- [Small](#)

Baskets

- George Fuller Collection
 - Plants and Wildlife
- 60 Springs

Native Tree 2, Kauri

Original Filename: NativeTree_2_kauri.jpg ([view](#))

Original Size: 133 KB

Original Image Type: image/jpeg



Agathis australis, kauri

[View in GISBOOST](#)

Easting 1693427.751

Northing 5675223.223

Created by: [admin](#) Last Edited by: [Elise Smith](#) Last Edited:
24/11/2008 20:19

 Flag as: [inaccurate](#) | [duplicate](#) | [inappropriate](#) | [entered by mistake](#) | [has typos](#)

Related Topics:

- [Plants and Wildlife](#)

Discuss This Topic

There are 0 comments in this discussion.

[join this discussion](#)

Tags

Tags: [kauri](#), [Agathis](#), [Notable tree](#), [Plant ID](#)

Search: 

Kete Pukekura Park - Staging





Elise Smith  | [Logout](#)

[Home](#) | [Browse](#) | [About](#) | [Help](#) | [Contact](#) | [Add Item](#) | [Add basket](#)

Refine your results

Options

Sort by:  In reverse? That are: 

- Topics (0)
- Images (1)**
- Audio (1)
- Videos (0)
- Web Links (0)
- Documents (1)
- Discussion (0)

Results in images tagged as "Plant ID 106"

Showing 1-1 results of 1



Native Tree 2, Kauri

The oldest kauri in Pukekura Park Plant ID 106 *Agathis australis*, kauri View in GISBOOST Easting 1693427.751 Northing 5675223.223 [more >>](#)

Edit Go To Favorites Help

Back Search Favorites

http://staging.kete.pukekura.org.nz/documents/0000/0000/0004/NativeTree_2_Agathis_oldest.pdf

Save a Copy 122% Sign

NATIVE TREE: 2

SPECIES: *Agathis australis*.

COMMON NAME(S): Kauri.

B.B CATEGORY: Native Historic Tree - Local Interest.

ORIGINAL READINGS

LOCATION: Foot of Monument Hill, Pukekura Park.

DATE MEASURED: 1969

HEIGHT: 66 ft (20.1 m)

CANOPY SPREAD: -

DBH: 24 in (61 cm)

BURSTALL'S NOTES: The following is from a letter by W.W. Smith, a well-known natural historian and custodian of Pukekura Park, 1908 to 1921, to the Parks and Reserves Department dated 4th May 1936: "The young tree, when seven years old was presented to the park by the late Captain Waller in 1909. It grew for two years in the lawn where the larger of two Puriris are now growing. In March 1911 it was planted where it now grows. I attribute its rapid and vigorous growth to its being planted in the rich black soil with which the walk was made. This soil was thrown out from the bottom of the extension of the lake above the upper bridge, by a gang of Maori's who completed the work. The tree is growing in a warm and sheltered valley, which also greatly favours its growth."

CURRENT READINGS

UPDATED LOCATION: Pukekura Park, 65 m from the upper, smaller, bridge on the track heading towards Brooklands through the Rhododendron Dell.

DATE MEASURED: 30th January 2002

HEIGHT: 24.3 m

CANOPY SPREAD: 13.3 m; only one reading possible as the east to west canopy is overhanging the

NEW PLYMOUTH DISTRICT COUNCIL **Pukekura Park Project**



Map Tools

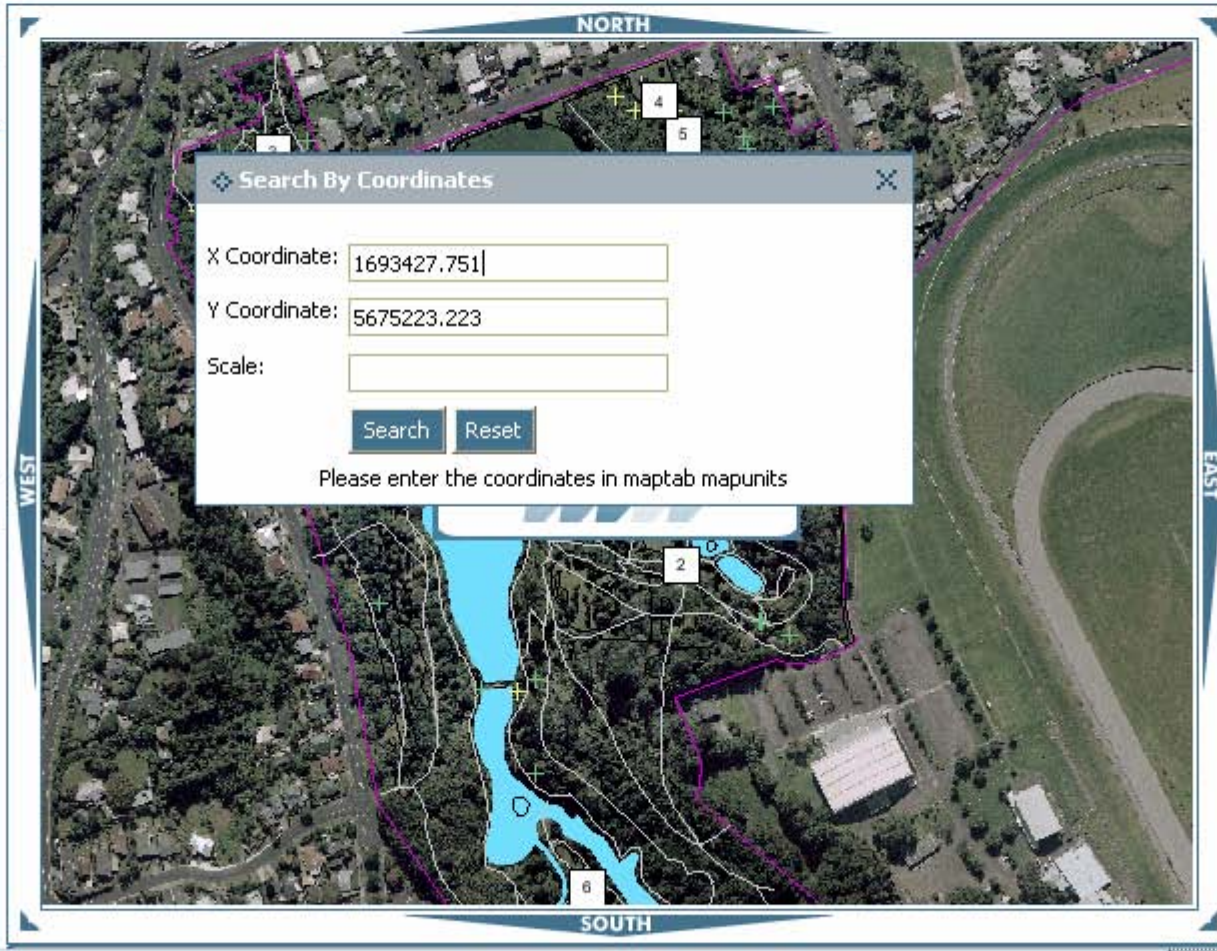
Welcome fopp | [Logout](#) | [Change Password](#)

Search Tools
type (species) search
[Icons]

Advanced Tools
Selection
Redlining
Measure
Buffer selections
Get Directions
Search by Co-ordinates

Layer Manager

- Pukekura Park Project**
- Notable trees
 - Bird food plants
 - Ethno trees
 - Spring sites
 - Paths
 - Streams
 - Islands



Selection List

- Notable trees
- Check All
- 1 Tree no. 6
 - 2 Tree no. 11
 - 3 Tree no. 13
 - 4 Tree no. 51
 - 5 Tree no. 56
 - 6 Tree no. 67

Legend

- FOPP
- Notable trees
- Bird food plants
- Ethno trees
- Spring sites
- Paths
- Streams
- Islands
- Lakes
- Lawns
- Park Polygon
- Urban Ortho 2005

Bibliography

- Convention on Biological Diversity. GAP analysis
<http://www.cbd.int/protected/gap.shtml>
- ESRI www.esri.com GIS for Libraries and Museums
 - <http://www.esri.com/industries/libraries/news-community/data-model-botanical.html>
- Global Biodiversity Information Facility (GBIF)
http://www2.gbif.org/visionen_online.pdf
- Kagan, James S., *Biodiversity informatics: challenges and opportunities for applying biodiversity information to management and conservation*. Institute for Natural Resources, Oregon State University, Portland, Oregon 97215
- Meredith, Thomas C. (1998) In *Empowerment, Marginalisation and Public Participation GIS* (Ed, Craig, W., Harris, T. and Weiner, D.) Santa Barbara, California, USA, pp. 58.

